

# BARRIERS AND OPPORTUNITIES

ALTERNATIVE FUELS

GROUND SERVICE EQUIPMENT



# CARGO AIRLINES

- ✦ NO WALK-ONS
- ✦ LOADS
- ✦ REMOTE LOCATION
- ✦ LACK OF FIXED GATES



# FedEx EXPERIENCE

- ✦ BAGGAGE TUGS
- ✦ AIRCRAFT TUGS
- ✦ AIRCRAFT LOADERS
- ✦ CLEAN FLEET



# OPERATIONAL COMPATIBILITY

- ✦ DUTY CYCLE
- ✦ SERVICE DEMANDS
- ✦ OPERATOR SAFETY



# MAINTENANCE

- ✦ DURABILITY
- ✦ OEM SUPPORT
- ✦ PARTS AVAILABILITY
- ✦ TRAINING



# COSTS

- ✦ INITIAL INVESTMENT
- ✦ INFRASTRUCTURE
- ✦ FUEL
- ✦ OUT OF SERVICE
- ✦ MAINTENANCE
- ✦ TRAINING



# BARRIERS

- ✦ FUEL DENSITY
- ✦ FUELING
- ✦ RELIABILITY
- ✦ DUTY COMPATIBILITY
- ✦ PARTS AND MAINTENANCE



# OPPORTUNITIES

- ✦ CENTRALIZED
- ✦ LIMITED RADIUS OF OPERATION
- ✦ DECREASING COSTS
- ✦ IMPROVING TECHNOLOGY

